

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Wyoming State Office P.O. Box 1828 Cheyenne, Wyoming 82003-1828

January 2, 2002

Dear Reader:

The Bureau of Land Management (BLM) has prepared this Draft Environmental Impact Statement (DEIS) to document and disclose the results of environmental analysis. A copy of this document has been provided to you for your review. You also may view the DEIS on the Wyoming BLM homepage (www.wy.blm.gov) and Powder River Basin EIS web site at http://www.prb-eis.org. Copies of the DEIS also are available for public inspection at the following BLM offices:

Bureau of Land Management Wyoming State Office 5353 Yellowstone Road Cheyenne, Wyoming 82009

Bureau of Land Management Buffalo Field Office 1425 Fort Street Buffalo, Wyoming 82834 Bureau of Land Management Casper Field Office 2987 Prospector Drive Casper, Wyoming 82604-2968

We recommend that you begin by reading the Preface of the DEIS, which will orient you to the document.

As a result of the analysis documented in this DEIS, our preferred alternative, at this time, is Alternative 1. We will not; however, make a final decision until we have reviewed comments on the DEIS and completed the FEIS.

Public comments on this DEIS will be accepted for 90 days following the date the Environmental Protection Agency publishes its Notice of Availability in the *Federal Register*. The BLM will notify all parties on the project mailing list of the dates when comments will be accepted. During this time, you are welcome to submit written comments.

During the comment period, the BLM will hold public meetings (anticipated during March 2002) or other public involvement activities. The BLM will notify the public of these meetings or activities through public notices, news media releases, the Wyoming BLM homepage (www.wy.blm.gov), the project's homepage (www.prb-eis.org), or mailings. These notifications will provide at least 15-days' notice of public meetings or gatherings and 30-days' notice of written comment requests.

The agencies are required to respond in the Final Environmental Impact Statement (FEIS) to all substantive comments submitted on the DEIS. The comment period mentioned above provides you, the public, with an opportunity to make an impact on the content of the document and; therefore, potentially affect the decision that will be made after the FEIS is released. We ask that your comments relate directly to the DEIS, that you are as specific as possible, and that you cite the location or locations in the document on which you are commenting. Although public opinions for or against the alternatives are of interest, often they are not useful for modifying an EIS. Additionally, they seldom have any bearing on the criteria the agencies must use to make decisions regarding proposals. Substantive comments should: (1) give any new information that could alter conclusions; (2) show why or how analysis or assumptions are flawed; (3) show errors in data, sources, or methods; or (4) request assessment clarifications that bear on conclusions.

Please retain this copy of the DEIS for future reference because the FEIS may be published in abbreviated format. If you have any questions or require additional copies of this document, please contact Paul Beels 307-684-1168. We appreciate your interest in the management of the public lands.

Comments on the DEIS should be sent to Paul Beels, Project Manager, Bureau Land management Buffalo Field Office, 1425 Fort Street, Buffalo, Wyoming 82834-2436.

Sincerely,

Alan R. Piérson

State Director

Draft Environmental Impact Statement Powder River Basin Oil and Gas Project Campbell, Converse, Johnson, and Sheridan Counties

Lead Agency: Bureau of Land Management

Buffalo Field Office Buffalo, Wyoming

Cooperating Agencies: Bureau of Land Management

Casper Field Office Casper, Wyoming

USDA Forest Service

Medicine Bow-Routt National Forest

Douglas, Wyoming

State of Wyoming

For Further Information, Contact: Paul Beels

Bureau of Land Management

1425 Fort Street

Buffalo, Wyoming 82834-2436

(307) 684-1168

Abstract

A group of oil and gas companies (Companies) has notified the Bureau of Land Management and Forest Service of their intent to develop additional coal bed methane (CBM) resources in Wyoming's Powder River Basin. The Proposed Action includes drilling, completing, operating, and reclaiming almost 39,400 new CBM wells and constructing, operating, and reclaiming various ancillary facilities needed to support the new wells. The Proposed Action would occur in an almost 8,000,000-acre Project Area. Drilling would begin in 2002 and continue for 10 years.

Three alternatives were considered in detail. They were Alternative 1 — the Proposed Action, Alternative 2 — the Proposed Action with Reduced Emission Levels and Expanded Disposed Water Handling Scenario, and Alternative 3 — No Action. Alternative 1 consisted of a combination of the Companies' proposal and the BLM's Reasonable Foreseeable Development Scenario. Alternative 2 was developed in response to issues raised during the public and agency scoping process. This alternative, which consists of Alternative 2A and 2B, would replace some of the proposed gas-fired compressors with electrical compressors and would involve less water discharged directly to the sub-watersheds. The No Action alternative is required by the National Environmental Policy Act for comparison to other alternatives analyzed in the EIS. For this project, the No Action Alternative would not authorize additional natural gas development on Federal leases within the Project Area. Drilling could continue on State and private leases,

The Wyoming State Director is the BLM's Authorized Officer responsible for preparing this Draft Environmental Impact Statement.

Preface

n Environmental Impact Statement (EIS) usually is not read like a book — from chapter one to the end. The best way to read an EIS depends on your interests. You may be more interested in effects, whereas others might have more interest in the details of the proposed project or be more concerned about what opportunities were made available to the public to be involved in the environmental assessment process. Many readers probably just want to know what is being proposed and how it will affect them.

This document follows the format established in the National Environmental Policy Act's regulations (40 CFR 1500 to 1508). The following paragraphs outline information contained in the chapters and appendices so readers may find the parts of interest without having to read the entire document.

- > Summary: contains a short, simple discussion to provide the reader and the decision makers with a sketch of the more important aspects of the EIS. The reader can obtain additional, more-detailed information from the actual text of the EIS.
- ➤ Chapter 1 Purpose and Need: identifies the proposed action and describes the purpose of and need for the proposed action, history of oil and gas activities in the Powder River Basin, decisions to be made by the agencies, agencies' roles and responsibilities, the National Environmental Policy Act (NEPA) process, and other permits required.
- ➤ Chapter 2 Public Participation, Issue Identification, and Alternative Development: describes the Proposed Action, the significant or key issues associated with the Proposed Action, and alternatives to that action, including the no action alternative. Action alternatives that meet the purpose and need were developed by the agencies in response to one or more of the key issues. Alternatives considered but dropped from detailed consideration are identified along with the rationale for not including them in the analysis. This chapter also provides a comparative analysis of the environmental effects of the primary alternatives to provide a clear basis of choice among options for the decision maker and public. The lead agency's preferred alternative is identified.
- ➤ Chapter 3 Affected Environment: describes the present condition of the environment that would be affected by implementation of the proposed action or any action alternative.
- ➤ Chapter 4 Environmental Consequences: describes the probable direct, indirect, and cumulative effects to the human environment that would result from implementing the Proposed Action or alternatives. The discussion also addresses the short-term uses versus long-term productiv-

- ity, unavoidable impacts, and irreversible or irretrievable impacts. Reasonably foreseeable activities near the proposed project are identified.
- ➤ Chapter 5 Land Use Planning and Management: contains the analysis of the alternatives for conformance with the Buffalo Resource Area Resource Management Plan, Platte River Resource Management Plan, and Medicine Bow National Forest Land and Resource Management Plan.
- ➤ Chapter 6 Consultation with Others: identifies the agencies, companies, and organizations consulted as well as the cooperating agencies.
- ➤ Chapter 7 Preparers and Contributors: identifies the people involved in the research, writing, and internal review of the draft EIS.
- ➤ Chapter 8 Distribution and Review of the Draft EIS: lists the agencies, organizations, and individuals who received a copy of the draft EIS.
- ➤ Chapter 9 Glossary: describes the technical terms used in the draft EIS.
- ➤ Chapter 10 References Cited: lists the references cited in the draft EIS.
- ➤ *Index*: contains cross references and identifies the pages where key topics can be found.
- Appendices: contain technical and non-technical information that is important to full comprehension of the NEPA analysis, but was too long to be included in the primary chapters.

Acronyms and Abbreviations used in this EIS

ADT Average Daily Traffic

APD Application for Permit to Drill

AUM Animal Unit Month

BACT Best Available Control Technology

bcf Billion Cubic Feet
BFO Buffalo Field Office
BFOA Buffalo Field Office Area

BLM U.S. Department of Interior, Bureau of Land Management

BMP Best Management Practices

CBM Coal Bed Methane

CEQ Council on Environmental Quality

CFO Casper Field Office
CFOA Casper Field Office Area
CFR Code of Federal Regulations
cfs Cubic Feet per Second
CMF Central Metering Facility
COA Conditions of Approval
COE U.S. Army Corps of Engineers

CSU Controlled Surface Use

CWA Clean Water Act

DEIS Draft Environmental Impact Statement
EIS Environmental Impact Statement
EPA U.S. Environmental Protection Agency

ESA Endangered Species Act

FEIS Final Environmental Impact Statement
FERC Federal Energy Regulatory Agency
FLPMA Federal Land Policy and Management Act
FS U.S. Department of Agriculture, Forest Service

FWS U.S. Department of Interior, Fish and Wildlife Service

gpm Gallons per Minute

HP Horsepower kV Kilovolt

LAD Land Application Disposal

LRMP Land and Resource Management Plan

mcf Thousand Cubic Feet mmcf Million Cubic Feet

MMRP Mitigation, Monitoring, and Reporting Plan

MOC Memorandum of Cooperation

MW Megawatt

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NL No Lease

NOAA National Oceanic and Atmospheric Administration

NOI Notice of Intent NOS Notice of Staking

NPDES National Pollutant Discharge Elimination System NRCS National Resource and Conservation Service

NRHP National Register of Historic Places

NSO No Surface Occupancy

PM₁₀ Respirable Particulate Matter less than 10 microns in aerody-

namic diameter

POD Plan of Development ppm Parts per Million PRB Powder River Basin

PSD Prevention of Significant Deterioration

psi Pounds per Square Inch

RFD Reasonably Foreseeable Development RFFA Reasonable Foreseeable Future Actions

RMP Resource Management Plan

ROD Record of Decision

ROS Recreational Opportunity Spectrum

ROW Right-of-Way

SHPO State Historic Preservation Office

SLT Standard Lease Terms
SOI Scenic Integrity Objectives

SUP Special Use Permit

SUPO Surface Use Plan of Operations
TBNG Thunder Basin National Grassland
TCP Traditional Cultural Properties

TDS Total Dissolved Solids
TL Timing Limitation
TSS Total Suspended Solids
USC United States Code

USDC U.S. Department of Commerce USDI U.S. Department of the Interior USDOT U.S. Department of Transportation

USGS U.S. Department of Interior, Geological Survey

VQO Visual Quality Objective VRM Visual Resource Management

WDEQ Wyoming Department of Environmental Quality

WDOT Wyoming Department of Transportation
WGFD Wyoming Game and Fish Department
WHMA Wildlife Habitat Management Area

WOGCC Wyoming Oil and Gas Conservation Commission

WSEO Wyoming State Engineer's Office WSGS Wyoming State Geological Survey